October 31, 1999

Title of Partnership/Project: NASA's GSFC Earth and Space Science K-12 Investigations Project

Name of Principal Investigator: Dr. Robert Gabrys, Chief GSFC Education Office

Statement of Purpose/goals of partnerships/project

The Purpose of the Project:

- 1. To establish a network of teachers who will be trained and work within their school districts to encourage the use of NASA Internet-based investigations among their colleagues, participate in pilot testing and provide feedback through an electronic format for the improvement of the investigations.
- 2. Establish an electronic feedback system on-line.
- 3. Pilot test investigations electronically.

Goals/Objectives for the Past Quarter:

- 1. To establish the on-line electronic feedback system accessible through the GSFC education homepage. See: http://education.gsfc.nasa.gov
- 2. To develop the structure for the research design for a pilot testing model.
- 3. To begin putting investigations on-line for use with electronic feedback system.

What Have We Accomplished?

- 1. The model for the electronic feedback system is on-line through the GSFC homepage.
- 2. The structure for the research design for pilot testing has been completed.
- 3. Approximately 75% of the investigations have been finalized and put online for pilot testing.

Good News/Challenges

1. Response from teachers informally hearing about the availability of the investigations on-line has been positive.

- 2. An unintended effect is that a major curriculum development project with Montgomery and Anne Arundel Counties in Maryland is making use of the electronic material in new earth/space science courses to be implemented in September 2000, and are willing to participate in the pilot test.
- 3. The amount of work to get investigations developed by classroom teacher "web-ready" is much more time consuming that originally thought, primarily because of teacher unfamiliarity with web design.
- 4. We were able to work out arrangements for forward funding the project with the NASA GSFC business office.
- 5. 20 teachers have been involved with us to date.

Early Lessons Learned

- 1. Curriculum development by teachers, while politically correct, calls for more skill than just being a classroom teacher.
- 2. Connecting to National Standards from more than a perception-based decision structure is new ground that has very few promising practices associated with it.
- 3. Teachers have a genuine interest in accessing materials that will help them improve instruction.